What is claimed is:

1. A torsional-vibration damper for decoupling torsional vibration between a drive assembly and a secondary assembly, comprising:

a first connector operatively connected to one of either the drive assembly and the secondary assembly, the first connector comprising a hollow cylinder;

a pressure body connected to the first connector;

a second connector operatively connected to the first connector permitting transmission of rotational motion therebetween;

an axial displacement limiter associated with at least one of the first and the second connectors; and

a ramp unit comprising

a resilient member configured to store and release energy generated by axial displacement between the first and the second connectors; and

a ramp body connected to the second connector, the ramp body comprising a first ramp and a second ramp operatively interactive with the pressure body, the first and second ramps being inclined toward one another to define a stable position when the first and second ramps and the pressure body are pressed into engagement with one another by the resilient member,

wherein the first and the second connectors are rotatable with respect to one another through a predetermined angle of rotation measured from the stable position,

wherein the axial displacement limiter limits a maximum rotation out of the stable position, and

wherein the ramp unit is at least partially disposed within the hollow cylinder.

2. The torsional-vibration damper as defined by claim 1, wherein the ramp body is at least partially disposed within the hollow cylinder.

3. The torsional-vibration damper as defined by claim 1, wherein the resilient member is a spring that is at least partially disposed within the first connector.

4. The torsional-vibration damper as defined by claim 1, wherein the resilient member is at least partially disposed within the hollow cylinder of the first connector.

5. The torsional-vibration damper as defined by claim 1, wherein the pressure body is rigidly connected to the first connector and comprises a pin disposed normal to a longitudinal axis of the torsional-vibration damper.

6. The torsional-vibration damper as defined by claim 5, wherein the ramp body is disposed within the first connector so as to be axially displaceable and rotatable with respect thereto.

7. The torsional-vibration damper as defined by claim 5, wherein the ramp body defines a transverse hole therein, the first ramp and the second ramp being defined by the transverse hole.

8. The torsional-vibration damper as defined by claim 1, wherein the ramp body is rigidly connected to the second connector.

9. The torsional-vibration damper as defined by claim 1, wherein the ramp body is integrally formed with the second connector.

10. The torsional-vibration damper as defined by claim 1, wherein the first ramp and the second ramp are symmetrically disposed around a first plane of symmetry that contains a longitudinal axis of the torsional-vibration damper.

11. The torsional-vibration damper as defined by claim 10, wherein the ramp body further comprises a second pair of first and second ramps, the second pair of first and second ramps being symmetrically disposed around a second plane of symmetry that contains the longitudinal axis of the torsional-vibration damper.

12. The torsional-vibration damper as defined by claim 1, wherein the first ramp and the second ramp of the ramp body subtend an angle that is between about 80° and about 140°.

13. A torsional-vibration damper for decoupling torsional vibration from a drive assembly and a secondary assembly, comprising:

a first connector operatively connected to one of either the drive assembly and the secondary assembly, the first connector comprising a hollow cylinder;

a second connector operatively connected to the first connector permitting transmission of rotational motion therebetween;

a pressure body connected to the first connector;

an axial displacement limiter associated with at least one of the first and the second connectors; and

a ramp unit comprising

a resilient member configured to store and release energy generated by axial displacement between the first and the second connectors;

a first ramp body connected to the second connector, the first ramp body comprising a first ramp and a second ramp; and

a second ramp body connected to the first connector, the second ramp body comprising a first ramp and a second ramp operatively interactive with the first and second ramps of the first ramp body, the first and second ramps of each ramp body being inclined toward one another to define a stable position when the first and second ramps of the first ramp body and the first and second ramps of the second ramp body are pressed into engagement with one another by the resilient member,

wherein the first and the second connectors are rotatable with respect to one another through a predetermined angle of rotation measured from the stable position,

wherein the axial displacement limiter limits a maximum rotation out of the stable position, and

wherein the ramp unit is at least partially disposed within the hollow cylinder.

14. The torsional-vibration damper as defined by claim 13, wherein the second ramp body is at least partially disposed within the hollow cylinder.

15. The torsional-vibration damper as defined by claim 13, wherein the resilient member is a spring that is at least partially disposed within the first connector.

16. The torsional-vibration damper as defined by claim 13, wherein the resilient member is at least partially disposed within the hollow cylinder of the first connector.

17. The torsional-vibration damper as defined by claim 13, wherein the second ramp body is configured to be axially displaceable within the first connector.

18. The torsional-vibration damper as defined by claim 13, wherein the second ramp body is rotatably connected to the first connector.

19. The torsional-vibration damper as defined by claim 18, wherein the pressure body comprises a rotary joint being formed by a connector pin that is disposed normal to a longitudinal axis of the torsional-vibration damper and is rigidly connected to the first connector, the connector pin passing through at least one elongated slot that is disposed within the second ramp body, normal to the longitudinal axis of the torsional-vibration damper.

20. The torsional-vibration damper as defined by claim 13, wherein the first and the second ramp bodies together form a dog clutch.

21. The torsional-vibration damper as defined by claim 13, wherein the first ramp body is rigidly connected to the second connector.

22. The torsional-vibration damper as defined by claim 13, wherein the first ramp body is integrally formed with the second connector.

23. The torsional-vibration damper as defined by claim 13, wherein the first ramp and the second ramp of each ramp body are symmetrically disposed around a first plane of symmetry that contains a longitudinal axis of the torsional-vibration damper.

24. The torsional-vibration damper as defined by claim 23, wherein each ramp body further comprises a second pair of first and second ramps, the second pair of first and second ramps being symmetrically disposed around a second plane of symmetry that contains a longitudinal axis of the torsional-vibration damper and is normal to the first plane of symmetry.

25. The torsional-vibration damper as defined by claim 13, wherein the first ramp and the second ramp of each ramp body subtend an angle that is between about 80° and about 140°.